

## REMARKS

This is a full and timely response to the final Office Action mailed March 9, 2007. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### Present Status of Patent Application

Upon entry of the amendments in this response, claims 1, 2, 4, 6-11, 13-23, 25, 32, 33, and 35-38 remain pending in the present application. More specifically, claims 3, 5, 12, 24, and 26-31 have been previously canceled; claim 34 has been currently canceled without prejudice, waiver or disclaimer; claims 1 and 33 have been currently amended with no introduction of new matter; claims 2, 8-11, and 14-23 are original claims; and claims 4, 6, 7, 13, 25, 32, 33, and 35-38 have been previously presented.

Reconsideration and allowance of the application and presently pending claims are respectfully requested.

#### A. Indication of Allowability

Applicants wish to place on record their sincere gratitude towards Examiner for indicating that Applicants' claim 32 has been allowed.

#### B. Objection to the Drawings

##### Statement of the Objection

*The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, 'the temperature control device' as claimed in claim 34 must be shown or the feature canceled from the claim. No new matter should be entered...*

##### Response to the Objection

In the interests of moving forward prosecution in this case and to reduce the number of disputed issues, Applicants have opted to cancel claim 34 without prejudice, waiver or disclaimer. Applicants reserve the right to pursue the subject matter of this canceled claim in a continuing application, if Applicants so chose, and do not intend to dedicate the canceled subject matter to the public.

Applicants respectfully assert that the objection to the drawings vis-à-vis claim 34 has been rendered moot as a result of the cancellation.

**C. Claim Rejections under 35 U.S.C. §112**

**Statement of the Rejection**

*Claims 1, 2, 4, 6-11, 13-23 and 25 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

**Response to the Rejection**

**Claim 1**

Applicants have currently amended claim 1 to clarify the nature of the subject matter covered by the claim. Specifically, amended claim 1 now cites, in pertinent part: *a phosphor composition comprising phosphor particles that are selected to have a  $d_{90}$  size in a range of about 30 micrometers to 45 micrometers, wherein  $d_{90}$  refers to a selected size at which 90 volume percent of the particles are smaller than the selected size...*

In rejecting Applicants' claim 1, the Office action further points out: *It is not clear whether 'size' is meant to refer to the diameter of the phosphor particles or the composition comprising the phosphor particles.* As cited above, Applicants have amended claim 1 so as to clarify that 'size' pertains to the size of the phosphor particles rather than the size of the composition.

The Office action further points: *The disclosure (page 15) also fails to explain  $d_{90}$ .* Applicants respectfully draw attention to the cited page 15 of the specification, which states in pertinent part: *Electrophoretic deposition methods have been used successfully with larger phosphor particles, e.g. having mean particle diameter in the range of about 13 micrometers to about 20 micrometers, and a  $d_{90}$  in range of about 30 micrometers to about 45 micrometers, where  $d_{90}$  refers to the size at which 90 volume percent of the particles are smaller than the indicated size.* (Emphasis added)

As evidenced by the comma after the word 'micrometers' and before the word 'and' (as emphasized above for ease of identification), this part of the specification is using two examples of 'larger phosphor particles': 1) *having mean particle diameter in the range of about 13 micrometers to about 20 micrometers*, and 2) *a  $d_{90}$  in range of about 30 micrometers to about 45 micrometers*. The ambiguity in claim 1 wherein both these aspects were claimed earlier has now been clarified by

deleting example 1) and using example 2) only.

In light of the current amendment, Applicants respectfully assert that the rejection has been overcome and claim 1 is now allowable. Consequently, Applicants hereby request withdrawal of the rejection followed by allowance of claim 1.

**Claims 2, 4, 6-11, 13-23, and 25**

Because independent claim 1 is allowable, claims 2, 4, 6-11, 13-23, and 25 that depend directly or indirectly on claim 1 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request allowance of claims 2, 4, 6-11, 13-23, and 25.

**D. Claim Rejections under 35 U.S.C. §103**

**Statement of the Rejection**

*Claims 33-38 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,504,301 to Lowery, and further in view of U.S. Patent 6,791,150 to Takagi.*

**Response to the Rejection**

**Claim 33-38**

As is known, the MPEP provides several guidelines for rejecting a claim under 35 U.S.C. §103(a). Specifically, reference is made to MPEP 706.2(j) *Contents of a 35 U.S.C. 103 Rejection*, which states in pertinent part:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.  
(Emphasis added)

Applicants respectfully assert that the rejection of claims 33-38 under 35 U.S.C. §103(a) fails to satisfy the three basic criteria highlighted above. Remarks related to individual claims are presented below.

### Claim 33

The first criterion under MPEP 706.2(j) states that there must be some suggestion or motivation to combine reference teachings. In the present rejection, two references have been cited as combinedly anticipating each element of Applicants' claim 33. Unfortunately, no proper motivation has been disclosed that would lead one of ordinary skill in the art to combine these two references. Applicants respectfully assert that it is improper on the part of the Office action to merely point to certain selected aspects of Lowery and Takagi and state that it would be logical to combine these two references because of a perceived advantage in doing so. (In this matter, attention is drawn to the Office action statement: *Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include a drive circuit providing current in pulse mode for operating the laser diode of Lowery as taught by Takagi for converting electric signal to optical signal for a display.*)

Applicants' assertion may be further substantiated by using an example wherein a prior art reference other than Lowery may contain a disclosure relating to application of gold plating on pins of a light emitting device such as the one disclosed by Lowery. Even though the gold plating provides several advantages, it cannot be automatically concluded that one of ordinary skill in the art would be motivated to modify Lowery's light emitting device to include gold plating on the pins, unless Lowery disclosed a reason to do so.

Similarly, it is illogical to presume that one of ordinary skill in the art would modify Lowery's device to incorporate a driver circuit, when there is no disclosure in Lowery to suggest using his device for converting a pulsed mode (or a CW mode) electric signal to an optical signal for a display. On the other hand, Lowery recommends in his col. 4, line 58 to col. 5, line 7, the use of certain DC voltages for his LEDs.

In this matter, it may be further relevant to point out that it is legally impermissible to utilize hindsight obtained via Applicants' own disclosure to assert that a combination of prior art references would be apparent to one of ordinary skill in the art.

Consequently, for at least the reasons outlined above, Applicants respectfully assert that the rejection fails to satisfy the first criterion of MPEP 706.2(j) to establish a *prima facie* case of obviousness as required for a proper rejection under 35 U.S.C. §103(a). The rejection further fails to satisfy the third criterion for reasons described below.

Claim 33 now includes "*a drive circuit for operating the laser diode in at least one of a*

*pulsed mode and a continuous wave mode.*” This aspect is described in Applicants’ specification (page 9, lines 21-23), which cites: *The light emitting device may include drive circuitry for operating the laser diode in pulse mode and/or in continuous wave mode* (Emphasis added). The cited prior art combination of Lowery and Takagi do not individually or combinedly disclose a device that incorporates a driver circuit that allows operation of the device in a pulse mode as well as allowing it to operate in an alternative mode - a continuous wave mode.

Consequently, Applicants respectfully assert that the Office action fails to satisfy the third criterion of MPEP 706.2(j) (vis-à-vis the prior art reference (or references when combined) must teach or suggest all the claim limitations) for establishing a *prima facie* case of obviousness as necessary for a proper rejection under 35 U.S.C. §103(a).

In summary, for at least the reasons provided above, Applicants respectfully request withdrawal of the rejection followed by allowance of claim 33.

#### **Claim 34**

Applicants have opted to cancel claim 34 and respectfully assert that the rejection of this claim has been thereby rendered moot.

#### **Claims 35-38**

Because independent claim 33 is allowable, claims 35-38 that each depends directly or indirectly on claim 33 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request allowance of claims 35-38.

#### **Prior Art Made of Record**

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

### **CONCLUSION**

In light of the reasons set forth above, Applicants respectfully submit that pending claims 1, 2, 4, 6-11, 13-23, 25, and 33, and 35-38 are in condition for allowance, in addition to allowed claim 32. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned representative at (404) 610-5689.

Respectfully submitted,

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I hereby certify that this paper is being electronically transmitted to the Commissioner for Patents on the date shown below:

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